N.A.C.A. BULLETIN

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EDITORIAL DEPARTMENT NOTE

The three articles in this issue are interrelated and together provide a broad coverage of what has at times been called the "constructive" phase of accounting. Our first article deals with the accountant's part in industrial research—in studies of industry trends, management policies, organization structure, and accounting and financial methods and controls. The second article deals more specifically with development work in the industrial accounting field, while the third is concerned with the day-to-day operations of a systems department.

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INDUSTRIAL RESEARCH AND ITS RELATION TO ACCOUNTING

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THE perplexing problems which form the subject matter of industrial research within a given company come within the purview of the chief accounting officer, who can do much to give direction to, and breathe life into, the efforts of an alert and inquisitive management anxious to make a particular business more effective. The following remarks apply with equal force to those companies large enough to have a formal research division or department, and to those which are too small to justify that formal recognition of the research function. This is true because research is, in essence, an attitude of mind and not a box on an organization chart. Its effectiveness depends upon the type of leadership which the company enjoys and the curiosity which that leadership engenders throughout the organization in the never ending attempt to do the job better.

A research program in a given company, therefore, is not something to be cleaned, pressed, and worn only on those holidays and Sundays of industrial life when particular problems arise, but is the everyday suit of clothes which we all must wear if we are to be progressive and effective members of the management fraternity. All research needs for its raw materials is problems. I am sure we would all agree that the supply of that raw material is fully adequate at the present time.

Types of Problems

The problems facing any business are capable of classification and should be so classified in approaching their study. It can be said without very much exaggeration that the major classes of problems are found in most businesses. The most common types of problems are those dealing with:

1. Industry trends.
2. The position of the particular company in its industry.
3. Policy questions covering the fields of sales, procurement, industrial relations, and finance.

4. Organization structure.
5. Accounting and financial methods and controls.

The foregoing classification is not meant to be exhaustive, although most specific problems could be classified under one or more of the foregoing groups. We shall have ample field for adequate illustration if we deal with these particular classes of problems.

Industry Trends

Practically every management is concerned perpetually with the kind of an industry in which it finds itself. Is it growing? If so, is it growing uniformly or regionally? Is it receding? If so, is it receding as a total industry or is only some segment of it declining? It seems to me that the chief accounting officer of any business is doing something less than his job if he is not setting himself up to find out basic trend information about the industry in which his company is engaged, and about the industries which his company serves in the sale of its products or services. The sources of such information are legion and the chief accounting officer should insist that proper sources be found and utilized as a practical help to give direction to management's thinking. A few examples will illustrate what we mean in this category.

In the department store field, for example, a number of universities have made comprehensive studies of the retail business in general and the department store industry in particular, and some of these studies are kept up to date sufficiently to offer practical help. The National Retail Dry Goods Association has also developed typical figures for departmental operations, expense ratios, etc. The department store is rare that does not find it very helpful to utilize these published sources. In many cities comprehensive help can be found in the Federal Reserve figures, by weeks and by months.

As a second example, many industries regularly submit their figures to a confidential and impartial body and are able to make ready comparisons with summarized data returned to them from such a body. Trade associations frequently find such service of real help to the member. Government figures and statistics in many fields are sufficiently accurate and up to date to be worth while. Whatever may be the specific form or content of information in an industry, accountants will do management a service to utilize

the information in a thorough, constructive, and helpful manner to point out demonstrated trends in the industry.

The Company's Position

I have indicated that some groups of companies submit their figures to a confidential body and are able to compare their own figures with industry averages. A study of these over a period of time may indicate whether the company is gaining or losing position. Many companies utilize services which keep them up to date on the movement of their goods in various markets. Reputable studies are often prepared by substantial trade associations and trade papers. Government figures by cities and states may be used. Again, whatever the specific source of information may be, the chief accounting officer is doing something less than his full job if he does not insist that such information be developed and used to help management.

I realize that industry trend and company position data are matters outside the present scope of the chief accounting officer's job in many companies. I realize further that probably some accountants have attempted to serve management through the use of such information and have found that management is not receptive. My only answer to these two objections is that they simply have not tried hard enough to develop and present such information in a manner that will enlist management's interest. The business executive who is not intrigued and thankful for carefully prepared and interestingly presented information about his industry and his company's position in it is a rare individual. It is the accountant's job to find out how to make such material so interesting that it will command proper attention.

Policy Questions

I have indicated previously that policy questions are involved in all of the major functions of a business. In the field of sales policies, for example, it may appear that profitable opportunities exist to enter a new field, expand the existing line, change the character of the product line, utilize new means of distribution, etc. If the policy question is one involving possible entrance into a new line, the accounting officer who is on his job will insist that a careful study be made of the industry in which the new line is involved and will require that a careful and conclusive answer be found to the broad question of what fundamental advantage his company

will have in this new line which other companies do not or cannot have. The old saw about the grass being greener on the other side of the fence seems to develop added significance in lush times or in time of stress. Too many people are unwilling to get down to brass tacks in their own industry and do the things necessary to be successful therein, but instead seek an antidote for their own indifferent success in the hope for success in another field. I am not advocating that companies should not expand outside their present lines, but I am definitely advocating that a careful study be made of all phases of the projected activity before the company invests its capital in a field which is foreign to its present operation.

Another policy question lies in the field of distribution. Suppose that a business has always followed a somewhat orthodox pattern in its industry of selling through distributors and dealers, and suppose further that this industry has developed to the point where there is keen competition through these regular channels. Finally, suppose that a certain volume through these channels is necessary to achieve the costs which will allow sales at established prices and leave the necessary margin to pay the distributor and the dealer, with a reasonable residue of net profit. Such a condition may pose a policy question of whether it might not be better to sell a part of the output through some multiple unit retailer, either under the company's own brand or under a private brand, in order to maintain adequate volume in the plants. This requires research in a field that should be familiar ground to the accounting officer. He should develop and present to his management a complete story showing what this assured volume will do to costs, at how much lower margin this business may be taken and still produce adequate profit, and all of the other collateral questions. Again I am not advocating such a procedure, but it seems clear to me that if we have the potential productive capacity which exists in a majority of fields, an alert management will be searching for ways and means to reduce the cost of doing business, particularly in the field of distribution, and at the same time find some means of assured volume for a part of its capacity. I am aware of the real and alleged disadvantages of placing a significant part of the output in the hands of a single customer. However, we have had considerable experience dealing with large multiple unit distributors and their supplier companies. We have observed their relationship at close range, and it is our considered opinion that in most instances a sound manufacturer stands to gain sub-

stantial advantages from the sale of part of his output through a channel that has demonstrated its ability to deliver sound values to the consumer at reduced prices. My point here again is that the answer to such a question is not easy and cannot be made by an off-the-cuff decision. The accounting officer is doing less than his job if he does not only insist that it be studied, but also does a good deal of the research himself.

Many other examples could be cited as matters of policy. The foregoing are illustrative of the types of problems which come up in this field. As a summary, it is my feeling that the accounting officer should insist that accurate and significant information be developed through proper study before a decision is made which involves any major policy matter.

Organization Questions

Here is a very natural field to enlist the accountant's interest. Since the accountant is familiar with the company's account classifications, and since any attempt at a budgetary program or an expense control program must be tied in with the company's organization, it seems to me that this is a logical field for research. Further, it is timely, because too many companies have allowed cumbersome organization structures to develop during the war period. They must find ways and means to simplify that structure if the efforts of their people are to be fully utilized in handling the affairs of the business. For instance, it is relatively easy in times of good business to make a case for greatly expanded staff activities. Personnel departments exhibit some of the characteristics of a guinea pig in their propensity to grow and multiply. Market research departments can keep everlastingly busy; yes, even accounting departments can expand to produce voluminous reports and statistics. All of these things may be nice to have, but unless their development is carefully watched they will grow beyond the needs of the business. It seems to me, therefore, that the chief accounting officer, in the very natural process of watching the company's expenses, should lend his weight to a comprehensive review of the organization structure of the company.

The objective of such a review should be to provide for the smooth, economical handling of the things which the company has to do to remain in business, and for the development of an extremely questioning attitude toward those activities which are not in the main stream. For instance, a company may have a

greatly expanded testing program in its personnel department. It should be possible to isolate the cost of that program. I feel that the chief accounting officer is well within his prerogative to find out from the line executives who should be benefited by such a program what the specific benefits are, in terms of better selection of employees, improved judgment in selecting employees for promotion, and other collateral questions. If it cannot be demonstrated that the testing program is of practical value in such terms as these, such a program should be curtailed or eliminated. The accounting officer should insist that this activity be reviewed in the research attitude of mind and a nonemotional answer be found concerning the solution of the problem.

Within the accounting department itself, people may be added and units of organization created which are not absolutely essential to the main event in which the business is entered. The major reason for the existence of that segment of the accounting department which deals with operating figures lies in the ability to produce information which allows the line executives to run the business more effectively and at proper expense levels. The accountant therefore should take matters in his own hands and insist that his operating accounting departments be subject to a critical review again in the light of what they contribute to the profitable operation of the business.

There may have developed a considerable amount of training activities which were useful in wartime when large numbers of new employees were being introduced into unfamiliar surroundings. Studies should be made now to determine whether the employee trained under such a program sells more, operates with less scrap, or does any part of his job significantly better than do employees not subject to such training.

In summary, the whole objective of research into organization questions should lead toward the production of a simple pattern under which people of ability can operate effectively unencumbered by unnecessary routine paper work and staff activities which really bother rather than help them.

Industrial Relations Questions

The field of industrial relations encompasses that broad area which has to do with the working relationships of people. Great companies remain great because they have given adequate thought to the provision of an atmosphere in which people of ability can

grow. Such an atmosphere is rarely, if ever, created through the use of gadgets, systems, or attempted short cuts. It grows through the development and maintenance of a philosophy which is put into practice through sincere, honest, judicial executives. Many of us have been hounded by experts on incentive plans, merit rating systems, job classification programs, etc. I suggest that accountants insist on a careful review of such proposals and attempt to throw their weight on the problem in such a manner that management will not expect these devices to do the job that only hard work and sound thinking can do.

From time to time articles appear in business and general magazines and books describing some plan by which a given company has found it possible to enlist the continuing interest and wholehearted efforts of its employees. We know that we will be asked soon thereafter to help some company install such a plan. We believe that such an approach to the human relations problem is unsound and that the plan that has been described is something which cannot be transplanted willy-nilly to another set of circumstances. My point here is that the accounting officer can do much by example in his own department, by raising questions concerning the salary relationships between department heads and subordinates, and by insisting on a sound, fair policy of salary administration, to force the development of more careful handling of people. He can further this general objective as well by insisting that careful study and research be made of any proposed systems or gadgets by which someone expects to short-cut this laborious and interesting process of providing an atmosphere and helping people to grow.

Accounting Methods and Controls

I have alluded previously to the basic requirement of the operating accounting division of the accounting department as being the source of information which helps line executives to operate the business better. The report structures which most businesses had prior to the war, for example, were subject to many revisions as companies centered their attention on getting out goods at some disregard of the cost. Control reports which had shown themselves to be valuable in the prewar period went out the window. The people who used those reports may no longer be in the executive group. Foremen have been subjected to extensive training programs in many instances. It seems time, therefore, for the

accounting officer to adopt as research project number one for his own department a complete review of the report structure in his business. This will be done best if he first assures himself that the classification of accounts is in complete harmony with revisions in organization structure which have been brought about through any changes in character of the business. The next step should be to think through the problem of the kinds of information which any new activity of the business should require, and review that along with the report structure which existed prior to the war period. This review will make it possible to eliminate reports on activities which no longer exist or which have changed in character materially.

Having thought through the problem himself the accounting officer should then carefully go over the information needs of the major line executives, not in an atmosphere of telling them of information they should have, but in an atmosphere of free discussion, from which comes the best combined judgment of the line executive and the accounting officer with respect to the reports which are to be instituted and maintained. Having decided what reports are to be produced, the accounting officer should then follow through, particularly with any new reports for old executives and all reports for recent additions to the executive group, to see that the most benefit is being secured from the information shown in these reports.

In addition to the revised report structure, the accounting officer should have as a research project of high priority a complete review of the methods and procedures which he is utilizing in all aspects of his accounting operation. This is best done usually by assigning a member of the accounting staff the full time job of such review. If this member needs specialized help or if it is felt desirable to check his findings, the company may well find it feasible to work closely with the certified public accounting firm or with such other outside agency as can render help on the problem.

Other examples could be given of work within the accounting department itself, but these two major projects are of great significance in the whole stream of research carried on throughout the business. I should like to say here also that the foregoing remarks do not imply that reports or procedures are subject only to this one over-all study. The alert accounting officer is constantly seeking ways and means to improve his performance in

these two important areas. By so doing, he is showing by example the benefits of a continuous application of the inquiring, curious research approach to business problems in other areas.

Cost Reduction

While great interest exists at the present time in the general subject of cost reduction, this broad field will command greater and greater attention of competent managements in the foreseeable future. Too often cost reduction is carried on in a frenized atmosphere. Too much surgery and too little diagnosis and therapy are brought to bear on the problem. An expense report comes out, or the profit and loss statement for the company as a whole is issued showing red figures. It has probably been clear to the accounting officer for some time that if the business were to see its volume shrink to the sales reported on the given profit and loss statement, red figures would be inevitable at present expense levels. The accounting officer further may have attempted to enlist the interest of his general management in doing something about cost reduction in an orderly, planned manner. Too many managements, however, want to postpone the inevitable day and adopt the attitude of a man passing the graveyard on a dark night. They believe that a considerable amount of whistling may scare away the ghosts. Well managed companies, on the other hand, are aware of the necessity for consideration of expense reduction before they are forced to do so by the appearance of red figures.

Economy vs. Cost Reduction

There is more to this problem than meets the eye. In fact, there is an expense aspect running through practically all activities in the business. Too often the adoption of a surgical method reduces expenses, but also destroys values unnecessarily. For example, sales expenses can be reduced by cutting advertising, laying off salesmen, cutting down the number of calls salesmen make, and other equally obvious and equally immediate methods. This may not be a sound procedure and would not have to be taken if certain basic questions in the selling operation had been given attention soon enough. I can think of one company, for example, which went along for a number of years spending about a million and a half dollars in advertising, in media whose impact was heaviest in the section of the United States east of the Mis-

sissippi and north of the Ohio. A simple examination of the sales by areas showed clearly that for a long period of years the company did not have distribution in the very areas where their advertising was heaviest. The argument was advanced that heavy advertising would force distribution. While it may help, it is fallacious to accept that easy answer to the problem of maldistribution. The basic problem was that buying habits of consumers and the means of distributing products to reach those consumers had changed. The company had not changed its sales policies to conform with these changes in pattern in the industry in which it was engaged. The cost excesses in that operation were not in high advertising or high expenses for salesmen; they were in a failure to change the sales policies of the company so that a proper sales organization could operate with proper distributor outlets in a manner that would utilize and merchandise the advertising effectively. It is my firm belief that any chief accounting officer who would let a company spend that much money in both advertising and sales expense and be unmindful of the continued ineffectiveness of the operation is no credit to his calling. He cannot intelligently lay claim to a critical control of expenses without understanding what those expenses mean and whether the activities they represent are being effectively carried on. I am happy to say that the same company now spends considerably more than a million and a half for advertising but, through a change in sales policy and sales personnel to implement it, together with a revision of the field selling organization, the total distribution cost has been materially reduced.

Reducing Staff Activities

Another result of surgical treatment is the lopping off of staff activities merely because they did not exist at some previous period when the company's volume was in the neighborhood of its present volume. Again a careful job of expense reduction requires selectivity in handling this problem. It requires that careful judgment be exercised in balancing temporary shortcomings against long-term benefits. I have spoken before about testing programs and the need for critical review of their activities. I was once responsible for starting a testing program in a business where no testing had ever been done. I had one member on my staff who was keen on the subject of testing. She deluged me with all kinds of tests

until I finally made it clear to her that I would be interested in testing only if she could validate the test by giving it to our already experienced people and seeing whether the results in the test showed a high correlation with the actual results on the job. She found such a test for one of our operations which expanded greatly in a certain seasonal period. Without going into detail, we were able, through the use of the test, to reduce the temporary employees which we hired for a period of about two months from about 1,000 to just over 500. When the expense for testing appeared on the expense reports I was immediately called to account for this activity. When it was over I was called again, but this time to compliment the department for doing a practical, sensible thing in a realm which in too many instances is impractical and without much sense. My point here is that if the head of a business were to throw out an entire testing operation he would certainly reduce expenses, but he might saddle himself with added expenses elsewhere because a useful tool for better selection of people was taken away.

Maintenance of Standards

Another example in the field lies in the realm of maintenance of proper labor standards. It is our view that the establishment of standards is certainly no more than half the job of having good basic material for an incentive program. In most plants it is equally important to maintain an adequate staff of methods and standards people who are capable of checking standards through additional time studies, testing out new methods, and giving everlasting attention to the short-range and long-range job of cost reduction. The surgical executive again may lop off a methods and standards department, yet may destroy a value which is inherent in the operations of that department and is fully as necessary as the actual work by the workers in the plant.

My whole point in these illustrations is simply that expense reduction is something more than cutting off activities and people who appear on an expense report. Expense reduction requires an understanding of those activities. It requires selectivity in their elimination and it requires that real effort be constantly applied to make sure that full values are being delivered for the dollars spent, not only at the time when expense reduction appears to be necessary but at all other times.

Conclusion

I am sure that I have said little that is new. I find as I grow older that those things which seem to be new are rarely so. I find, further, that the difference between excellent performance and just good performance usually lies in doing well-understood things just a little better. Knute Rockne used to say that every play was a potential scoring play and the reason he didn't score on every play was that some one or more of the players failed to do exactly what they should by a very narrow margin. My feeling is that the accounting officer will certainly find it interesting, will find a chance to enlarge his knowledge of the business, and will enhance his stature in the eyes of his associates if he places himself in a position to lend practical help and continued insistence on inquisitiveness, curiosity, and research into the multiple problems of his business. Too many accounting officers are either unwilling or unable to render such help. If they are unwilling, their future lies at the end of the road in the accounting department; in fact, it may well be behind them. If they are unable, they can correct that deficiency by study and experience in the fields of industrial relations, marketing, production, and other functions outside the accounting and financial fields. That margin of difference which Rockne talked about will come to them through such a broadening experience. With it they can lift themselves out of the realm of the figure historian, out of the realm of the mathematical wizard, out of the realm of the intellectual alpaca sleeves and green visor, and into the ranks of the respected executive group. Sound accounting knowledge obviously is a basic requirement. An equally basic requirement is such an understanding of the functions of business, such a realization of the exactitudes of its problems, and such an attitude in work with people that this sound accounting knowledge can be effectively put to work to further a continuing research program.

ACCOUNTING DEVELOPMENT WORK FOR A MANUFACTURING COMPANY

by THOMAS W. SPICER, Accounting Development Supervisor,
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THE search for new and improved methods of manufacture is a sort of religion in American industry, and the development engineer is its prophet. A large part of this country's progress in the manufacturing arts can be attributed to the engineer's unceasing conviction that "there must be a better way to do it." In the field of industrial accounting there is a similar opportunity for the systematic application of ingenuity and research, that is, for sustained, organized accounting development effort within the company. A great deal of valuable work has, of course, been done by independent authorities, consultants, and office equipment concerns toward the development of accounting techniques. However, many progressive firms have decided that, just as they need a separate engineering department devoted to the advancement of manufacturing design and methods for their particular products, it pays to have a separate group within their own organization assigned exclusively to the constant study and improvement of the company's accounting procedures.

This detachment from other accounting duties is preferred because in most cases it is not enough to assume that the regular operating accounting personnel will keep abreast of the latest developments in accounting and will adapt them to their own use as a matter of course. The operating accountant has no more opportunity to carry on a continuous program of development than would an engineer, if the latter were required to serve as shop foreman and at the same time design new products and initiate methods improvements. Ours may or may not be correctly termed the age of specialization, but we who have spent some time in accounting development work have proved to our own satisfaction that a comprehensive, hard-hitting development program, followed year after year by a full-time, specialized group, is the only effective means of producing real progress in accounting procedures. Some of the factors which aid in carrying on this type of effort are outlined here.

Basic Objectives

An organization, to be successful, should have definite aims in order that its course of action may be intelligently charted. With this thought in mind, the following points are suggested as defining the basic objectives of an accounting development group:

1. To make studies of accounting and related procedures in all parts of the company, with the aim of reducing costs and improving practices.
2. To keep informed of accounting progress outside the company (through publications, membership in professional associations, etc.) so that the experience of others may be drawn upon, where applicable, to the fullest extent.
3. To initiate joint action with other organizations of the company under which the maximum cooperation may be obtained in carrying on accounting developments.
4. To collaborate with groups responsible for regular methods work, so that the application of routine methods shall benefit from experience gained in development studies.

There is a fifth objective which could be added to this list from the standpoint of ultimate importance, even though it is more of an intangible thing; that is, to develop people as well as procedures. In my opinion, accounting development activity should provide one of the most effective advanced training centers for accounting personnel in the entire company.

The Development Program

In addition to a set of basic objectives, an organization should make concrete plans to carry out its announced function. In the case of the accounting development organization, the logical step is to draft a development program outlining the specific projects to be worked on. Here again the analogy with the development engineer is apparent. An engineer does not just start out to do some general exploratory work with nothing particular in mind (at least, not if his research director knows about it), and the accounting development man who embarks on a vague crusade of "general improvements" is not likely to wind up with very definite accomplishments.

The accounting development program can be set up to cover any desired length of time, or perhaps to provide only that the

listed subjects shall be carried to a conclusion regardless of time. However, I think it is preferable to establish the program for a specific period of time so that there may be a cutting-off point at which to appraise the results for the period elapsed, decide which projects should be continued on into the next period, and take a fresh start. Besides, the establishment of a definite time limit for the program provides an incentive for the group to complete its studies within the period.

Types of Studies

In our own case we have chosen to make up a program for each calendar year, beginning around November to lay the groundwork for the next year's activity. For the sake of illustration, here are some typical examples of the kinds of subjects which might be available for study by the development accountants in almost any sizable manufacturing company:

1. Prescribe the cost and accounting system for a newly-acquired factory unit, a new division, or a new product, taking into account the manufacturing, distributing, pricing, and natural cost characteristics involved.
2. Formulate consistent, company-wide fundamentals to be observed in periodic revisions of standard costs. This might cover, for instance, the establishment of preferred methods for establishing the amount of factory expense to be recovered in burden rates, for distributing the expense to burden centers, for computing standard material costs, and for treating scrap and spoilage losses, service department expenses, etc. The study might also include determination of the timing of revisions, degree of consistency which should be observed throughout the company with respect to costing methods, how to improve the accuracy of standard cost factors, and how to reduce the work interval and the over-all cost of making revisions.
3. Survey the payroll and associated accounting routines with the aim of simplifying existing procedures, providing an even flow of work and introducing mechanized methods in place of hand operations wherever justified by cost reduction or in consideration of other benefits. Such a study, in addition to the procedures themselves,

might very well include also a review of company policies governing remuneration, in order to see whether some of the rules which were adopted under previously existing conditions might not now be unduly burdensome upon the payroll department and could be modified in favor of simpler directives which would provide equivalent results.

4. Study all reports issued to shop or general management. Where practicable, simplify their preparation, eliminate them entirely if the need for the information has languished, reduce frequency of issue, combine with other reports, or redesign them to improve their usefulness. This one should be near the top of the list, particularly for a newly organized development group. Industrial accountants will recognize how easy it is to perpetuate outgrown reports through sheer inertia, and how frequent is the tendency to design another report when some special information is required, even though it may be possible to modify an existing report slightly to obtain the desired answer.
5. Investigate the possibility of simplifying or improving the accuracy of variance accounting, including allocation by lines of product. A related study could be made of the methods of apportioning administrative and selling expenses by sales classes.
6. Survey present arrangements for retention of accounting records; determine whether proper safeguards are provided, and whether costs of maintaining records can be reduced by prescribing logical and consistent retention periods, methods of storage, cataloging, etc.
7. Study the introduction or improvement of methods of budgetary control.

Annual Program

The foregoing are illustrative of types of projects which have been undertaken by the development organizations in our own company or in other companies with which we have compared notes. There are many others which will suggest themselves in the light of local conditions. The number of subjects selected for action in any one year, and their nature, will of course depend upon the size of the company, the amount of development work

which has been done in the past, and many other considerations, but the sum total must be a blueprint for accounting progress. The appearance of a subject on the program does not necessarily guarantee that the study will be an unqualified success (since exploratory projects may be included for the purpose of finding out whether the opportunity for improvement really exists), but no project should be programmed unless on the basis of mature judgment it offers a fair chance of returning to the company substantial value in cost reduction or other advantage.

A safe rule to follow in appraising possible subjects for investigation is that ordinarily the estimated results of the study for the first year after completion should justify its undertaking when compared with the estimated cost of development. Naturally this is a rough appraisal, since at the time the subject is being considered no one knows just what results will be obtained. However, if the proposed study involves a simplification of existing procedures, it is not too difficult to estimate, from the total volume of work done, whether it would be reasonable to expect substantial reduction in effort from an intensive study of the methods now known to be in effect.

Project Listing

Since the selection of a program is so important to the successful performance of development work, the job of preparing it should not be a one-man affair. In our own case we begin, during the last quarter of the year, to send out requests to the accounting organizations serving the various operating departments, and also to the internal auditing division, asking for suggestions as to development studies which should be placed on the program for the following year. When the suggestions are all in they are edited to eliminate duplications or to combine related ideas where they complement each other, and to add whatever other suggestions we have collected at headquarters.

From this material a tentative project listing is prepared, including any jobs which are to be carried over as unfinished from the previous year, and the representatives of the accounting organizations are called together for a program huddle. At this meeting some of the suggested studies may be modified in scope or sidetracked in favor of more important items, and some may be set aside simply because there are too many to be handled properly in one year.

Out of this meeting comes the coordinated accounting development program for the succeeding year, agreed upon by all parties and waiting for the first blow to be struck. As a matter of clearing up the loose ends, any suggested projects which have been culled from the tentative list for lack of available manpower, or which should await more propitious timing, are given a reprieve if they are still believed to have merit. Such items are put away in the "ice box"—the file of development ideas for future reference. They will be considered for inclusion in the program for a subsequent year.

Reporting Progress

Along with the program, provision should be made for regular reports of progress on the development subjects included therein. We have found it worth while to issue a quarterly summary of results (Exhibit 1), using as a basis the list of studies as shown in the original program but now condensed in wordage, and showing for each item, in separate columns, a short review of the status at the end of the previous quarter and the additional progress made during the latest quarter. This information is furnished to the company comptroller, divisional comptrollers and others interested, and is intended to keep them apprised of the going rate of accounting development activity, as well as to provide milestones of accomplishment for the people who are carrying on the studies. While not primarily designed as a spur to the latter, it undoubtedly serves that purpose, too.

Approach to the Development Job

Although many phases of industrial accounting can be standardized to fit into predetermined methods or patterns, accounting development is hardly in this class. Every job must be approached as a new venture with its own problems, its own peculiar set of related circumstances, and its own avenues of possible solution. There is a new deal every time. For this reason it is impossible to write one all-inclusive specification outlining in detail just how every development proposition should be tackled. However, there are two general principles which have been road-tested in actual development work and have proved serviceable for converting ideas into accomplishments. These might be stated as follows:

1. Get everyone on the same team.
2. Have a plan of attack.

ACCOUNTING DEVELOPMENT PROGRAM—YEAR 194—

Subject	*Status as of September 30, 194—*	*Additional progress, or status as of December 31, 194—*
1. Study of payroll procedures at headquarters, with a view to logical division of work between payroll organization and treasury department, extension of mechanical methods, if feasible, and other simplifications in clerical effort.	Planning completed for replacement, to extent possible, of manual methods by payroll machine posting; including ordering of machines, preparation of instruction manual, and design of forms.	Trial run completed November 15. New plan has been accepted and cut over to new basis was made effective December 1, 194—.
2. Simplify accounting for plant service departments. Covers study of usefulness of present applicable accounting classifications and introduction of more economical clerical methods.	To be studied in fourth quarter.	Plan has been proposed to accounting service organizations for simplifying procedure based on: a. Use of average rather than individual hourly labor rates for extending time assignments b. Reducing number of repair charge classifications (previous breakdown not sufficiently used to warrant effort) c. Use of mechanical tabulating equipment to extend and summarize charges by order number and account classification Final approval or comments in respect to plan expected by January 31.
3. Study to improve cost and accounting procedures for the ——— shop, including special methods of accounting for spoilage losses, engineering, etc.	Folder has been prepared showing complete outline of plan now being followed, from payroll and vouchering through shop costing to pricing and sales accounting.	Study of one other manufacturer's system covering a similar product has been completed. One additional study scheduled at Blank Company in January.

EXHIBIT 1.

Teamwork

Teamwork is not a new discovery, but its application to this kind of effort is so vital to effective operation that it should be given top-billing in the list of development tools. It is not too hard to get ideas, once a definite objective has been decided upon and the problems have been spread out for analysis. The trick is to put the ideas into practice, to get them accepted by the most important person of all, the fellow who has to do the work after the study has been completed and the new rules written. If you have ever tried to put something new across, you know it is sometimes very difficult to "sell" even a good idea. Selling implies buying, and there is something in human nature that rebels just a little against being persuaded to a new course of action by the arguments of another. It may be pride, or stubbornness, or something with a more exotic name dreamed up by the professional psychologists, but there it is.

One of the best ways to accomplish harmony, and therefore teamwork, in development work is, simply, to operate in teams; that is, to place a committee in charge of each project which involves wide scope, assigning to the committee not only a development man but also a representative of each group which has a part in the work under study. Since the accounting organizations were represented in the formation of the program itself, their interest in the proceedings has already been registered and their actual participation in the studies is a logical step. It is also a helpful step, since the man on the operating side of the job knows his own field better than any outside investigator possiby can, and he usually has accumulated some ideas about the problems of his job and the phases where improvement would be most rewarding that will be of substantial aid to the study. He may also have the framework of a suggestion as to how the final objective of the study could be attained, but has never had the leisure to work out the details because of the necessity of keeping his regular work going. This is his chance to throw his ideas into the ring as a member of a group whose business it is to work out those details. It does not mean that the operating accountant will have to devote full time to the study, but he can give a portion of his time, assign some of his people to collaborate in furnishing necessary data, and meet as required with the committee, in order to assist in guiding and appraising the effort of the investigators as the work progresses.

Just as important in the development pattern is the committee approach, which recognizes that no one person has a corner on ideas. Two heads have generally proved better than one, and a variety of viewpoints focused on a single objective is likely to be productive. Of course, if you like proverbs, you also have to stop short of that other point where too many cooks begin to spoil the broth. You wouldn't build up a big committee organization to conduct a relatively minor investigation, any more than you would need a board of directors for a peanut stand. Nevertheless, the idea of enlisting the support and sympathy of those who will be affected by the study is an important consideration for the smaller as well as the larger jobs.

Plan of Attack

An army may travel on its stomach, but it also has to have an advance plan of action if it is to move successfully. So does development work. Not every project is of such magnitude as to require an elaborate schedule of the details to be investigated, but a lot of wasteful back-tracking can often be avoided by preparing at least a rough outline of the projected study. Organizing this outline will clarify the objective of the study in the minds of all who are to participate, may stimulate ideas as to new avenues of investigation, and should aid in making sure that no angles are overlooked. It will certainly be of help in providing a pattern by which the study may be conducted in orderly fashion, and a sort of yardstick against which progress can be charted as the work goes on.

The plan, at least for the more comprehensive studies, should define the nature of the work to be done by breaking down the main problem into its component phases, as far as this can be determined at the outset of the job. For instance, in a study involving revamping of the cost plan for a particular product or factory unit, the first phase would likely be to prepare an outline of the accounting and cost methods currently being followed, with flow charts, exhibits of papers used, and sufficient narrative to present a clear picture of the entire job. Another step might be to determine the manufacturing cost and statistical information which would be of greatest benefit to the pricing organization; a third, to explore with factory supervision the most effective means of providing control data, and so on.

This analysis may later on have to be recast and perhaps further detailed as the action unfolds but it will serve as a starting basis. Separating the main project into components is advantageous on at least two counts. From the purely mechanical standpoint it affords a definite set of subobjectives which can be isolated and approached individually, making the concurrent study of several phases possible. There is also a psychological advantage in that a comprehensive project viewed as a whole may look rather awe-inspiring, whereas if it is cut up into smaller pieces it begins to look like nothing more than a series of little problems, none of which offers great difficulty.

Exchange of Ideas

Contacts with the accounting organizations of other companies, with the aim of exploring new ideas and different techniques in the accounting field, can be made an interesting and otherwise rewarding feature of accounting development work. This has been a very satisfactory part of our experience, and we know of several other firms which have had occasion to supplement their own studies by first-hand research into the accounting and related procedures of their contemporaries. We have found other companies most cordial in receiving our representatives at their plants and offices, and entirely cooperative in explaining the fundamentals and operating details of their systems. There even have been times when our visiting team felt some embarrassment at the extensive advance work which had been done by their hosts in the way of preparing exhibits, special write-ups, and the like.

Such coutresy deserves the utmost consideration and we try to make sure that an expedition of this kind will be as painless as possible for the other fellow. With this in mind, we adhere to several points in planning visits to other concerns:

1. We have a specific problem or subject in view, and make it known in requesting the meeting, so that the scope of discussion is known in advance and the appropriate personnel of the cooperating company can be designated to meet with our representatives. Such visits are made only in connection with important subjects in which there is likely to be widespread interest.
2. We select companies which, because of the type of their operations, the special nature of the subject under study,

previous acquaintance, or for other reasons, we believe will welcome the idea of exchanging information.

3. Arrangements are made through the chief accounting officer, to ensure that such exchanges are in line with their company policy.
4. Length of stay is limited to two or, at most, three days, and timing is at the convenience of the host company.
5. An agenda or questionnaire is prepared in advance of the visit so that our people are of one mind as to the information they are seeking and will not develop lost motion by introducing haphazard lines of thought, or overlook important points.
6. Our visiting representatives are carefully chosen as people who know what they are after, who can absorb and interpret new facts quickly, and who, incidentally, have the ability to match the information they are requesting with parallel information about their own company's procedures, for a joint exchange is desired rather than a one-way proposition.

These points all revolve around a sincere desire to make each visit a matter of mutual benefit to the two parties. The results have been, on balance, very favorable from our point of view. It is hoped that the other companies have also gained from the free exchange of ideas.

The Employee Training Feature

As noted previously, accounting development work has considerable to offer in the way of advanced training possibilities for accounting personnel. The opportunity to study many different phases of the company's accounting and cost procedures, the team action in working progressively with others, and the constant search for new and better ways of doing things, all contribute to rounding out the individual's job knowledge and improving his orientation within the company.

For this reason the arguments in favor of rotational assignments of personnel, always good, should be especially applicable here. Not only should the training benefits be made available to selected accounting personnel, but the development organization itself will gain from the reasonably frequent introduction of new

blood and fresh viewpoints. I do not think development people necessarily grow stale on the job after a lengthy hitch, but it is true that a person transferred directly from an operating to a development assignment usually brings to his new job a down-to-earth awareness of the problems on the firing line that is extremely serviceable. It is one of the most useful qualities of the successful accounting development man.

Conclusion

An attempt has been made to sketch the outline of accounting development work as it applies to a manufacturing organization, to suggest its possibilities when accorded full status as a regular accounting activity within the company, rather than being relegated to the sparetime class, and to point out some of the tested ways by which this potential value may be realized. It was felt that such material might be especially pertinent at a time when managements are directing increased attention to their clerical costs and when a number of firms are becoming seriously interested in development activity of this nature. Such interest is likely to bear substantial fruit; for it is my firm conviction that accounting development effort pays.

The Cost Accountant of the Future

The cost accountant of the future will need to have a thorough grasp of general accountancy and statistical method, more than a smattering of engineering practice, a sound appreciation of economic theory, and a knowledge of applied psychology. Otherwise, how can he be equipped to set standards based upon standard waste allowances, machine speeds, time and motion study, to study the incidence of indirect cost, to organize an accounting routine and to "sell" the results of all this to workers of all grades—from operatives to general managers? Perhaps, after all, the proper education and training of cost accountants is *the* cost accounting problem.

A. A. Fitzgerald, "Modern Cost Accounting Techniques and Industrial Efficiency," in The Australian Accountant, *October 1946.*

OPERATING A SYSTEMS DEPARTMENT

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THE need for an effective control of the operating systems in industrial organization is becoming more and more evident to management. In a future where reduction of costs will certainly be the measure of success, the establishment and maintenance of standard procedures is recognized as a necessary factor. This control cannot be restricted to just the accounting routines, as is the case in many enterprises, but must be extended to include all the factory functions. Only thus can the control of systems result in reduced costs and shortened delivery cycles.

The Procedure

This article outlines some of the techniques that have been developed and successfully applied in controlling systems at the Camden Plant of the RCA Victor Division. The basic tool of effective systems control is the "procedure." Put the system on paper so that all may read and comply. The format of the procedure should be such that all necessary information can be shown and conveniently located, and a businesslike and effective appearance achieved. Procedures contain certain items of information that are common to all. For ease of reference the location of these items should be standardized. On the first page will appear the name of the publication, such as "XYZ Company Standard Procedure," the name of the systems department, the procedure number or identifying code, the page number and total number of pages, the functional classification covered, the subject, the effective date, and a line labeled "Supersedes," for use in revisions. The last page will include the distribution list, a list of the standard forms used, and a list of associated procedures.

It is well to standardize on the organization of the body of procedures by itemizing the major sections. These sections will include:

1. Scope, outlining the limits of the coverage.
2. Purpose, explaining the necessity and the intent of the procedure.
3. Definitions, clearly defining technical or unusual terms.
4. Responsibilities, emphasizing the individual responsibilities as outlined in the procedure.

The major headings of the procedure itself will be arranged either chronologically by the steps covered or functionally by departments and sections, according to the type of information covered.

Procedures Manual

Like all tools, in order to be usable the procedure must be readily available; hence, the Procedures Manual. For maximum usefulness it should have its contents systematically arranged so that the topics may be easily located. A method that has worked out satisfactorily is the establishment of functional classifications and the assignment of identifying blocks of numbers to them. All the functons of the enterprise are listed and grouped by general descriptive classifications. Each of these groups of functions is given a block of numbers, and all functions falling within each of the groups are given further breakdowns of the group series. For example, a functional group is material control, which has as its block of numbers the 2000 series. The functions included in material control with their assigned numbers are as follows:

2000—Material Control, General.
2010—Material Moving.
2020—Reject Control.
2025—Inventory Control.
2030—Miscellaneous Material Storing.
2040—Raw Material and Hardware Storing.
2050—Accumulation of Parts.
2060—Receiving.
2070—Stock Expediting.
2080—Tool Crib Operation.
2090—Hold Rooms.

Similarly, engineering is assigned the 1800 series, personnel is assigned the 2400 series, and so on for all other departments. All procedures are given identifying numbers according to their functional classification.

The classification of functions and the assignment of numbers will depend upon the type and size of the business. The blocks of numbers must be sufficiently large to accommodate all future publications. A good rule to follow is to estimate the number of procedures that will be issued, then multiply by four!

Control of Distribution

The effectiveness of procedures depends to a great extent on the widespread dissemination of the information covered. Therefore, it is important that distribution lists be carefully devised and kept up to date. A simple and practical method is to divide the plant into both departments and levels of supervision. "Standard" distribution includes all department heads and key personnel. These persons are keyed for all publications. "Distribution A" includes all supervisors and staff assistants reporting to the department heads. "Distribution B" includes all supervision and staff functions on the next supervisory level. "Distribution A" and "Distribution B" are further identified by departments to permit distribution to specific departments. This system, if properly followed, simplifies clerical work, facilitates control, and ensures complete plant coverage.

Method of Revision

The systems of most plants are usually in a dynamic state. One industrial leader has said that if a system has remained unchanged for one year, a lack of progressive thinking is indicated. Because of this ever-changing characteristic of industrial methods, some thought must be given to the problem of handling revisions to procedures. Revisions can be made in at least three ways; by distribution of addenda or errata sheets, by reissuing only the pages containing the revisions, and by reissuing the entire procedure. A major defect in the first two methods is the possibility of failing to cover all outstanding copies. Also they depend upon the recipients to incorporate properly the revisions in the manuals. Although the expense of typing and reproduction is slightly higher in reissuing the complete procedure, this method will greatly reduce the possibility of confusion and resultant loss due to the existence of contradictory instructions. Another advantage of the complete reissue method is that revisions need not be identified by a system of subnumbering.

Style of Presentation

An effective and uniform style is just as important in writing procedures as it is in writing novels, text books, or gossip columns. Procedures lose effectiveness in direct ratio to the lack of clarity and readability in the style of writing. The following are a few simple rules to guide the writer:

1. Use common, well-known terms.
2. Avoid big words.
3. Use short sentences.
4. Use words that convey the precise meaning desired.
5. Use the direct affirmative approach.
6. Place the important word or phrase at the beginning of the sentence and the important sentence at the beginning of the paragraph.
7. Be grammatically correct at all times.
8. Develop the information logically and in proper sequence.
9. Use graphical and columnar presentation when needed for clarity.
10. Use a standard method for indenting and numerically identifying sections and paragraphs.

Development of System

Each procedure represents painstaking effort, the productivity of which is greatly increased if the several factors entering into the development and installation of the procedure are fully understood. The pattern partakes of five phases: (1) determining the system, (2) writing the procedure, (3) selling the system, (4) installing the system, and (5) following up the system.

Determining the system involves getting a clear conception of the problem and the results to be accomplished, laying a plan of action, accumulating all the facts and details of the activities involved, ascertaining comparative costs, and organizing the solution. Accurate and comprehensive work at this stage will save much tedious and time-consuming retracing of steps in the subsequent development.

The next step is to write the procedure in the established form and submit it to department heads and other interested persons for comments and approval. The preliminary issuance in approval form is advocated for three main reasons. It gives the operating personnel an opportunity to inject their thinking into the system, it provides additional assurance that all phases are covered, and it evidences the agreement of the persons in charge of the activities concerned. It is here that the greatest mental concentration is required. All the details of the system must be included and all

the stages presented in logical flow. The fact that a preliminary presentation of an approval copy of the procedure is made does not mean that it can be used as an excuse for the presence of incomplete or inaccurate information. A good systems analyst will present a preliminary copy that will show little change when issued in final form.

The third phase, selling the system, is so important a factor in the success of a systems program, that it can hardly be overemphasized. Procedures, like any other commodity, are worthless on the shelves. Many worth-while installations have been destroyed simply because they were not sold. Regardless of the authority behind the program, those responsible for the operations involved must be convinced of the desirability of the new method. The specific advantages accruing to them must be demonstrated. If this selling approach is not followed the effectiveness of the system will be greatly reduced through resistance, lethargy, or even deliberate disregard.

Installation and Follow-Up

When approvals are obtained and a final procedure is issued, the task is by no means completed. The system must be installed, and it is the responsibility of the systems man to install it. There are many systems departments that remain ineffective because to them the procedure is the end rather than the means. A procedure is the well-known "scrap of paper" unless it has been completely installed and is operating to the letter. There are many cases where the writing has taken two days and the installation two months. Many installations will even require formal classes for the instruction of operating personnel. These training classes should be well organized and carefully presented. During an installation of a new system for keeping stockroom records, it was found necessary to test the clerks in simple arithmetic in order to determine their ability to make the necessary calculations.

Even with a complete installation, the job is still not finished. New systems have a habit of withering on the vine if not tended. Contrary practices and performance failures will creep into the routine as time passes. Also later developments in associated activities will necessitate revisions. To prevent such departures from the method as written, it is necessary to establish a periodic follow-up routine. This control is maintained by the use of a tickler file of all issued procedures. When a system has been com-

SCHEDULE OF ASSIGNMENTS

Project or Procedure Number	Description	Investigation Started	Distributed for Comment	Approvals Due	Final Draft	Issued	Installation Complete	Remarks

EXHIBIT 1.

pletely installed a card is placed in the file under the date on which a follow-up investigation is to be made. Each day or week a follow-up investigator pulls the cards as scheduled and determines the status and condition of the publication indicated on the card by contacting the persons concerned with the operation of the procedure. He follows the complete cycle of the system, investigating each activity for adherence to instruction and for possible improvement in the routine. When the follow-up is completed he prepares a report showing the status of the procedure, the completeness of performance, and recommendations for revisions or enforcement if necessary. He then submits these reports to the supervisor for the necessary action.

Internal Control

One of the reasons for designing and installing operating systems is to establish controls that are needed for efficient operation, performance measurement, and status reports. Presumably for the same reason that causes the proverbial shoemaker's children to be barefooted, systems departments frequently overlook the need for controls within the department itself. This need is a very definite one. The complexity of the work, coupled with the problems of reconciling divergent opinions and requirements, makes it difficult to maintain a high level of output. The installation of the following simple controls will ease the task of sustaining productivity:

1. Schedule of assignments (Exhibit 1).
2. Check list (Exhibit 2).

FINAL PROCEDURE CHECK LIST

(This list is to be attached to final approved version of procedure as soon as it has been completed by writer.)

.....Copies Ordered .....Total Distribution Final Procedure No.....

TITLE: .....

Checked by writer ☐ Transmittal letter ☐ Page Numbers
☐ Distribution ☐ Assoc. procedures ☐ Forms listed ☐ Indexing
Proof read by: ☐

.....Approved by supervisor
.....*Delivered to coordinator
.....To typing for stencil ..... Returned.....
.....Stencil checked by coordinator with writer
.....Stencil to typing for corrections ..... Returned.....
.....Stencil to pool for run-off ..... Returned.....
.....To typing for collating and addressing ..... Returned.....
.....Mailed

Note: This list is to be kept by coordinator for expediting purposes after step (*) above.

EXHIBIT 2.

3. Project record.
4. Follow-up summary report (Exhibit 3).

The schedule of assignments is a list of the projects assigned to each systems man, showing the scheduled dates for the start of the investigation, distribution of approval copies, return of approval copies, issuance of the final draft, and completion of installation. As each of these phases of the project is completed, the date is replaced by a check mark or cross, indicating that the proj-

FOLLOW-UP SUMMARY REPORT

Name of Procedure	Procedure Number	Date Issued	Date of Most Recent Follow-Up	Date Scheduled for Next Follow-Up	Procedure Working	Minor Revisions Needed	Minor Revisions Made	Major Revisions Needed	Major Revisions Made	Enforcement Needed	Enforcement Action Taken	Remarks

EXHIBIT 3.

ect has progressed to the next stage. Upon completion the project is removed from the schedule. Thus two purposes are served: each man's work is scheduled on an orderly basis, and the current status of all jobs is instantly available. A daily or weekly review of performance against schedule reveals any delays in the progress of an assignment and provides the supervisor with the opportunity to apply corrective measures.

The check list is used to ensure the inclusion of all necessary items on the publication and to control the movement of written material through typing, proof-reading, and reproduction. If some such means is not employed it will soon be discovered that items common to all publications, such as letter of transmittal, index information, and lists of forms involved, will be inadvertently omitted, and that some publications will be lost or pushed aside in the process of printing and reproduction. The importance of this control should not be minimized as it is just these seemingly minor omissions that result in loss of respect for the ability and efficiency of the systems department. In controlling the movement of written material, dates are entered on the check list when the material is sent to typing or printing. Follow-up is instigated if it fails to return on time. The dates are used also in scheduling material to prevent overloading of clerical capacity.

Reports on Assignments

The project record is a report made out by the systems analyst upon completion of an assignment. It consists of a brief resumé of the project, listing the scope, situation encountered, persons contacted, action taken, results, time spent on the job, and a calculation of costs and savings. This record is not only valuable for use in preparing accomplishment reports and supplying a summary of the over-all savings effected, but is extremely useful in selecting and directing future assignments.

The follow-up summary report is a monthly report issued by the follow-up investigator showing the status of all procedures. It indicates those that are operating according to procedure, those that need revisions or enforcement, and those that have been corrected or enforced as a result of the follow-up. For this report the supervisor is apprised of the adequacy of the follow-up, the promptness of remedial measures, and the operating effectiveness of the procedures.

Systems Standards

Like all other management techniques, systems work increases its effectiveness by the use of standards. In general, standards may be divided into two types: (1) rules governing the broad policy to be followed, and (2) rules governing specific application. Examples of the first are:

1. A system should consider only the operations to be performed and not the persons who will perform them.
2. A system should be automatic. It should not depend upon individual judgment or expediting.
3. A system should have as its goal the ultimate in economy of operation.
4. A system should have a specific objective in the cycle of operations and should completely accomplish that objective.
5. A system should contain clearly defined and allocated responsibilities. The responsibility for a specific activity or function should never be divided.

The second type of standards consists of rules to be followed in designing and installing specific systems. Since there is no common denominator, such as time in time study and cents per hour in job evaluation, quantitative standards in systems work are impractical. For example, no one can say that a purchase requisition should consist of only three copies, because that fact is determined by many variables, such as the type of business, the amount of control needed, the particular use of the purchase requisition, etc. However, without attempting to set up such exact criteria for use in all systems, it is possible to list the factors that must be considered. Decisions on these matters, once made, may be used as guides in installing similar systems. Such a list would include:

1. The use of manifests and tallysheets in the transmission of paperwork.
2. The requirement of signatures of recipients of paperwork and materials.
3. The use of file copies of paper work for follow-up, reference, and policy regulations.
4. The use of varicolored or numbered copies of paper work for identification.

5. Criteria for determining the advisability of using machine methods.
6. Frequency and extent of physical counts in the movement of materials.
7. The establishment of authorized signers of the various forms, especially those that disburse funds, incur expenses, or initiate appropriations.
8. The use of the different types of printed forms, such as hectonegative masters, continuous, snapout, and fanfold.
9. Use of internal controls in handling paper work within individual groups.
10. The method and frequency of delivery of paper work to the accounting department.

This list covers only a portion of the many factors that must be considered in establishing systems standards. In many cases it will be found to be uneconomical to devote time to the necessary research, because of the inherent lack of flexibility in systems work. Systems are designed to satisfy specific requirements, and when the requirements change the system must change. However, much can be done in the field of systems standards. The results will be faster installations, fewer mistakes, and greater uniformity.

COMING ARTICLES

In the *N. A. C. A. Bulletin*, March 15, 1947

What Cost Accounting Means to a Production Executive
by WALTER K. BAILEY

Productivity in Relation to Costs
by WILLIAM H. FRANKLIN

Budgetary Control of Manufacturing and Commercial Expenses
by J. BROOKS HECKERT